

**STUDY THE CHARACTERISTICS OF TDA7000 IC ON MULTIBAND
RECEIVER**

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ABSTRACT

STUDY THE CHARACTERISTICS OF TDA7000 IC ON MULTIBAND RECEIVER

A multiband receiver is a one of the group of frequencies system which receives only. Basically, it is an amplified type of “crystal radio” designed to receive AM transmissions. The “receiver” design uses no oscillators or other RF circuitry capable of interfering with aircraft communications. This study discusses the characteristics of the TDA7000 ic on multiband receiver by observe the effect of resistor and inductor to the voltage range as replacement for the frequency range. This study was carried out by build a multiband receiver circuit. Then, measurement of the input voltage and output voltage is conducted. From the data obtained, calculation for voltage gain is made. This study found that the voltage range for the receiver will presented in the graph. Lastly, the multiband receiver is type of radio wave that is important to carry information from one place to another by using air as a medium.

CHAPTER 1

INTRODUCTION

1.1 Background

Multi radio receiver is characterized by exceptional sensitivity, image rejection, signal to noise ratio and stability. By trying different antennas and location, the receiver has picked up AM and FM radio stations, TV video, car lock transmitters, cell phones, and even the microwave oven. Maybe FM stations are not properly clear because the antenna is insufficient for slope detection. Other signals that should be easy to receive include in-flight aircraft transmissions. A passive receiver from aircraft transmission will not interfere with communication or navigation systems, radio transmissions, wireless networks and devices, radar, radio control transmitters, certain security or alarm systems, and even unexpected oscillations in the circuit. A short antenna suitable for general listening but trimming the length for a desired band will give better sensitivity.

The Resistance was discovered by the year 1827 from Georg Simon Ohm, a German electrician. Ohm was born in Germany, in the city of Erlangen at 1787 and died at 1854.

Georg Simon Ohm noticed that different materials that are considered as electrically conductive, will not allow the current to flow within their body with the same ease. The difficulty that each material had, had to do with some parameters such as the type of the material and some external factors such as the temperature or the humidity of the atmosphere. (Cheney, Margaret, 1981).